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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,824	10/29/2003	Antonio Lain	200205659-2	7594

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FORT COLLINS, CO 80527-2400

EXAMINER

GERGISO, TECHANE

ART UNIT	PAPER NUMBER
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2137

NOTIFICATION DATE	DELIVERY MODE
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04/07/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/694,824	Applicant(s) LAIN ET AL.	
	Examiner TECHANE J. GERGISO	Art Unit 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5 and 8-14 is/are rejected.
- 7) ☒ Claim(s) 3, 4, 6, and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In view of the Pre-Appeal Brief filed on December 27, 2007 PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Emmanuel L Moise/ SPE

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwenk (US Pat. No.: 6, 222, 923) in view of Kitaya et al. (hereinafter referred to as Kitaya, US Pat. No.: 7,269,257).

As per claims 1 and 13:

Schwenk discloses a method and computer entity adapted to managing security keys generated from a tree-structured ancestral hierarchy and issued by or on behalf of a service provider in order to provide selective access to provision of a service, wherein invalidation of a key necessitates reconfiguration of each other key within the hierarchy to the extent another key and an invalidated key share common ancestry, the method comprising the steps of **(features of the invention in the preamble are not given patentable weight during examination.** The examiner suggests to incorporate any essential features of the invention from the preamble into body of the claims):

defining at least two groups of users of the service (column 3: lines 35-48; column 4: lines 41-55);
allocating within the hierarchy a distinct sub-tree domain for each group of users (column 3: lines 48-51); and
issuing keys to users from sub-trees domains within the hierarchy upon the basis of their grouping (column 4: lines 17-38).

Schwenk does not explicitly disclose the sub-tree domains in the hierarchy are distinct. Kitaya, in analogous art, however, teaches the sub-tree domains in the hierarchy are distinct

(column 3: lines 43-61; column 4: lines 25-33). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Schwenk to include the sub-tree domains in the hierarchy are distinct. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to provide an information processing system and an information processing method using an encryption key block, and a program distributing medium, which enables transmission of data safely to a valid user without relying on mutual authentication processing between a transmitter and a receiver of data as suggested by Kitaya in (column 3: lines 22-29).

As per claim 2:

Kitaya discloses method, wherein the at least two groups of users are defined upon the basis of a predetermined policy which provides that users are grouped according to their perceived value to a provider of the service (Figure 37A-D; Entity-Ann:3710, Entity-Bnk:3720.

As per claim 5:

Kitaya discloses method, wherein the ancestral hierarchy has a binary tree architecture (figure 3).

4. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwenk (US Pat. No.: 6, 222, 923) in view of Kitaya et al. (hereinafter referred to as Kitaya, US Pat. No.: 7,269,257) in further view of Wajs et al. (hereinafter referred to as Wajs, US Pat. No.: 7,155,611).

As per claim 8:

Schwenk and Kitaya do not explicitly disclose varying levels of service are available and a group of users of a low-service level are allocated dummy keys providing no security, thereby to obviate a need to reconfigure other user's keys upon their invalidation. Wajs, in analogous art, however, teaches varying levels of service are available and a group of users of a low-service level are allocated dummy keys providing no security, thereby to obviate a need to reconfigure other user's keys upon their invalidation (column 3: lines 43-61; column 4: lines 25-33). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Schwenk and Kitaya to include varying levels of service are available and a group of users of a low-service level are allocated dummy keys providing no security, thereby to obviate a need to reconfigure other user's keys upon their invalidation. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to provide a conditional access system for broadcast applications, said conditional access system comprising a number of subscribers, each subscriber having a terminal including a conditional access module and a secure device for storing entitlements as suggested by Wajs in (column 1: lines 51-57).

As per claim 9:

Kitaya discloses a method, wherein the service is a dynamic service and its value is ephemeral and based upon its contemporaneous nature (column 7: lines 15-25).

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5. Claims 10-11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwenk (US Pat. No.: 6, 222, 923) in view of Wajs et al. (hereinafter referred to as Wajs, US Pat. No.: 7,155,611).

As per claims 10 and 14:

Schwenk discloses a method and computer entity adapted to managing security key distribution to a plurality of users of a service comprising the steps of:

defining levels of service provision (column 3: lines 35-48; column 4: lines 41-55);

allocating keys to users which are indicative to a service provider of the level of service to which they are entitled (column 3: lines 48-51).

Schwenk does not explicitly disclose for at least one level of service provision, allocating dummy keys which do not provide security for the provision of the service. Wajs, in analogous art, however, teaches for at least one level of service provision, allocating dummy keys which do not provide security for the provision of the service (column 3: lines 43-61; column 4: lines 25-33). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Schwenk to include for at least one level of service provision, allocating dummy keys which do not provide security for the provision of the service. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to provide a conditional access system for broadcast applications, said conditional access system comprising a number of subscribers, each

subscriber having a terminal including a conditional access module and a secure device for storing entitlements as suggested by Wajs in (column 1: lines 51-57).

As per claim 11:

Wajs discloses a method, wherein method according to claim 10 wherein the placebo keys operate in such a manner that a user is not able to perceive a difference between a functioning security key and a dummy key (column 3: lines 43-61; column 4: lines 25-33).

Allowable Subject Matter

6. Claims 3-4 and 6-7 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

Claim 3 includes the following features of a digital signal recording disc and its corresponding methods, which are not taught or further suggested and would not have been obvious over prior arts of record and these features are: a first user group having the highest perceived value to the provider are allocated keys from a first sub-tree, and wherein keys from the first sub-tree share fewer ancestors with keys from other sub-trees than said keys from other sub-trees share with each other and keys from the first sub-tree share only one ancestor with said keys from other sub-trees.

Claim 6 includes the following features of a digital signal recording disc and its corresponding methods, which are not taught or further suggested and would not have been obvious over prior arts of record and these features are: the at least two groups of users are defined upon the basis of a predetermined policy which provides that users are grouped according to a perceived susceptibility of them ceasing to require the service, and a first user group having the highest perceived susceptibility are allocated keys from a first sub-tree, and wherein keys from the first sub-tree domain share fewer ancestors with keys from other sub-trees domains than said keys from other sub-trees domains share with each other; the service is a dynamic service and its value is ephemeral and based upon its contemporaneous nature.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

See the notice of reference cited in form PTO-892 for additional prior art.

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Techane J. Gergiso whose telephone number is (571) 272-3784 and fax number is (571) 273-3784. The examiner can normally be reached on 9:00am - 6:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

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Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/T. J. G./

Examiner, Art Unit 2137

/Emmanuel L. Moise/

Supervisory Patent Examiner, Art Unit 2137